

EXHIBIT 4A

CERTIFICATE OF REGISTRATION



This Certificate issued under the seal of the Copyright Office in accordance with title 17, United States Code, attests that registration has been made for the work identified below. The information on this certificate has been made a part of the Copyright Office records.

FORM TX
For a Nondramatic Literary Work
UNITED STATES COPYRIGHT OFFICE

TX 5-531-435



TX0005531435#

EFFECTIVE DATE OF REGISTRATION

JUN 14 2002

Month Day Year

OFFICIAL SEAL

REGISTER OF COPYRIGHTS
United States of America

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

1

TITLE OF THIS WORK ▼

Cisco IOS 11.1

PREVIOUS OR ALTERNATIVE TITLES ▼ Cisco IOS Release 11.1; Cisco IOS Version 11.1; Cisco Internetwork Operating System 11.1; Cisco Internetwork Operating System Release 11.1; Cisco Internetwork Operating System Version 11.1

PUBLICATION AS A CONTRIBUTION If this work was published as a contribution to a periodical, serial, or collection, give information about the collective work in which the contribution appeared. / Title of Collective Work ▼

If published in a periodical or serial give: Volume ▼

Number ▼

Issue Date ▼

On Pages ▼

2

NAME OF AUTHOR ▼

a Cisco Systems, Inc.

DATES OF BIRTH AND DEATH

Year Born ▼

Year Died ▼

Was this contribution to the work a "work made for hire?"

 Yes No

AUTHOR'S NATIONALITY OR DOMICILE

Name of Country

OR

Citizen of ▶ _____

Domiciled in ▶ _____

United States

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK

Anonymous?

 Yes No

Pseudonymous?

 Yes No

If the answer to either of these questions is "Yes," see detailed instructions.

NOTE

Under the law, the "author" of a "work made for hire" is generally the employer, not the employee (see Instructions). For any part of this work that was "made for hire" check "Yes" in the space provided, give the employer (or other person for whom the work was prepared) as "Author" of that part, and leave the space for dates of birth and death blank.

b

NAME OF AUTHOR ▼

DATES OF BIRTH AND DEATH

Year Born ▼

Year Died ▼

Was this contribution to the work a "work made for hire?"

 Yes No

AUTHOR'S NATIONALITY OR DOMICILE

Name of Country

OR

Citizen of ▶ _____

Domiciled in ▶ _____

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK

Anonymous?

 Yes No

Pseudonymous?

 Yes No

If the answer to either of these questions is "Yes," see detailed instructions.

c

NAME OF AUTHOR ▼

DATES OF BIRTH AND DEATH

Year Born ▼

Year Died ▼

Was this contribution to the work a "work made for hire?"

 Yes No

AUTHOR'S NATIONALITY OR DOMICILE

Name of Country

OR

Citizen of ▶ _____

Domiciled in ▶ _____

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK

Anonymous?

 Yes No

Pseudonymous?

 Yes No

If the answer to either of these questions is "Yes," see detailed instructions.

3**a**

YEAR IN WHICH CREATION OF THIS WORK WAS COMPLETED

1996

<Year in all cases.

DATE AND NATION OF FIRST PUBLICATION OF THIS PARTICULAR WORK

Complete this information ONLY if this work has been published.

Month ▶ February Day ▶ 28 Year ▶ 1996 Nation ▶

COPYRIGHT CLAIMANT(S) Name and address must be given even if the claimant is the same as the author given in space 2. ▼

Cisco Technology, Inc.
170 West Tasman Drive
San Jose, CA 95134

See instructions before completing this space.

TRANSFER If the claimant(s) named here in space 4 is (are) different from the author(s) named in space 2, give a brief statement of how the claimant(s) obtained ownership of the copyright. ▼

By agreement

APPLICATION RECEIVED

ONE DEPOSIT RECEIVED

JUN 14 2002 July 16, 2002

TWO DEPOSITS RECEIVED

FUND RECEIVED

DO NOT WRITE HERE

MORE ON BACK ▶ • Complete all applicable spaces (numbers 5-9) on the reverse side of this page.

• See detailed instructions.

• Sign the form at line 8.

DO NOT WRITE HERE

Page 1 of 4 pages

EXAMINED BY

TMS

FORM TX

CHECKED BY

 CORRESPONDENCE

Yes

FOR
COPYRIGHT
OFFICE
USE
ONLY

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

PREVIOUS REGISTRATION Has registration for this work, or for an earlier version of this work, already been made in the Copyright Office?

 Yes No If your answer is "Yes," why is another registration being sought? (Check appropriate box.) ▼

- a. This is the first published edition of a work previously registered in unpublished form.
 b. This is the first application submitted by this author as copyright claimant.
 c. This is a changed version of the work, as shown by space 8 on this application.

If your answer is "Yes," give Previous Registration Number ▶

Pending

Year of Registration ▶

2002

5

DERIVATIVE WORK OR COMPILED

Preexisting Material Identify any preexisting work or works that this work is based on or incorporates. ▼

Prior works by claimant and preexisting third party computer code

a 6

See instructions
before completing
this space.

b

Material Added to This Work Give a brief, general statement of the material that has been added to this work and in which copyright is claimed. ▼

New and revised computer code

a 7

DEPOSIT ACCOUNT If the registration fee is to be charged to a Deposit Account established in the Copyright Office, give name and number of Account. ▼

Name ▶

Account Number ▶

CORRESPONDENCE Give name and address to which correspondence about this application should be sent. Name/Address/Apt/City/State/ZIP ▼

Tu T. Tsao, Esq.

Fenwick & West LLP

2 Palo Alto Square

Palo Alto, CA 94306

Area code and daytime telephone number ▶ (650) 858-7696

Fax number ▶

(650) 494-1417

Email ▶ tttsao@fenwick.com

CERTIFICATION I, the undersigned, hereby certify that I am the

Check only one ▶

 author other copyright claimant owner of exclusive rights authorized agent of Cisco Technology, Inc.

Name of author or other copyright claimant, or owner of exclusive rights ▶

of the work identified in this application and that the statements made by me in this application are correct to the best of my knowledge.

8

Typed or printed name and date ▶ If this application gives a date of publication in space 3, do not sign and submit it before that date.

Robert A. Barr, Worldwide Patent Counsel

Date ▶

Handwritten signature (X) ▶
X - Robert A. Barr

Certificate will be mailed in window envelope to this address:

Name ▶ Susanne S. Morales, Paralegal / Fenwick & West LLP
Number/Street/Apt ▶ 2 Palo Alto Square
City/State/ZIP ▶ Palo Alto, CA 94306

YOU MUST

• Complete all necessary spaces

• Sign your application in space 3

STREET ADDRESS

1201 FENWICK ROAD

PALO ALTO, CA 94306

1. Application form

2. Nonrefundable filing fee in check or money order As of

July 1, 1999.

3. Deposit material

MAIL TO

Library of Congress

Copyright Office

101 Independence Avenue, S.E.

Washington, D.C. 20590-6000

9

*17 U.S.C. § 505(e): Any person who knowingly makes a false representation of a material fact in the application for copyright registration provided for by section 403, or in any written statement filed in connection with the application, shall be fined not more than \$2,500.

Name in block letters

JUN 1999-200,000

WEB REV: June 1999

1. Application form

2. Nonrefundable filing fee in check or money order As of

July 1, 1999.

3. Deposit material

MAIL TO

Library of Congress

Copyright Office

101 Independence Avenue, S.E.

Washington, D.C. 20590-6000

4. Filing fee for

Form TX is \$30.

5. Filing fee for

Form TX is \$30.

CONTINUATION SHEET FOR APPLICATION FORMS

- This Continuation Sheet is used in conjunction with Forms CA, PA, SE, SR, TX, and VA, only. Indicate which basic form you are continuing in the space in the upper right-hand corner.
- If at all possible, try to fit the information called for into the spaces provided on the basic form.
- If you do not have enough space for all the information you need to give on the basic form, use this Continuation Sheet and submit it with the basic form.
- If you submit this Continuation Sheet, clip (do not tape or staple) it to the basic form and fold the two together before submitting them.
- Space A, of this sheet is intended to identify the basic application. Space B is a continuation of Space 2 on the basic application. Space B is not applicable to Short forms.
- Space C (on the reverse side of this sheet) is for the continuation of Spaces 1, 4, or 6 on the basic application or for the continuation of Space 1 on any of the three Short Forms PA, TX, or VA.

DO NOT WRITE ABOVE THIS LINE. FOR COPYRIGHT OFFICE USE ONLY

FORM TX /CON

UNITED STATES COPYRIGHT OFFICE

R TX 5-531-435

TX005531435

PA	PAUSE	SEG	SEU	SR	SRU	TX	TXU	VA	VAU
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EFFECTIVE DATE OF REGISTRATION

JUN 14 2002

(Month) (Day) (Year)

CONTINUATION SHEET RECEIVED

JUN 14 2002

Page 3 of 4 pages

A
Identification of Application

IDENTIFICATION OF CONTINUATION SHEET: This sheet is a continuation of the application for copyright registration on the basic form submitted for the following work:

- **TITLE:** (Give the title as given under the heading "Title of this Work" in Space 1 of the basic form.)

Cisco IOS 11.1

- **NAME(S) AND ADDRESS(ES) OF COPYRIGHT CLAIMANT(S):** (Give the name and address of at least one copyright claimant as given in Space 4 of the basic form or Space 2 of any of the Short Forms PA, TX, or VA.)

Cisco Technology, Inc., 170 West Tasman Drive, San Jose, CA 95134

B
Continuation of Space 2

NAME OF AUTHOR ▼

(See Space C)

DATES OF BIRTH AND DEATH

Year Born▼

Year Died▼

d

Was this contribution to the work AUTHOR'S NATIONALITY OR DOMICILE a "work made for hire"?

Name of Country

- Yes
 No

OR Citizen of ► _____
Domiciled in ► _____

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK

Anonymous? Yes No

If the answer to either of these questions is "Yes," see detailed instructions.

Pseudonymous? Yes No

NATURE OF AUTHORSHIP Briefly describe nature of the material created by the author in which copyright is claimed. ▼

NAME OF AUTHOR ▼

DATES OF BIRTH AND DEATH

Year Born▼

Year Died▼

e

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Pseudonymous? Yes No

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CONTINUATION OF (Check which): Space 1 Space 4 Space 6 Space 2b

Name of Author	Work for Hire	Domicile	Anonymous	Pseudo-anonymous	Nature of Contribution
Energetic Systems	Yes	United States	Yes	No	Computer code
Metaplex, Inc.	Yes	United States	Yes	No	Computer code
Nano Solutions	Yes	United States	Yes	No	Documentation
Bev Talbott	No	United States	Yes	No	Documentation

C
Continuation
of other
Spaces

**Certificate
will be
mailed in
window
envelope
to this
address:**

Name ▼
Susanne S. Morales, Paralegal / Fenwick & West LLP

Number/Stree/Apt ▼

2 Palo Alto Square

City/State/ZIP ▼

Palo Alto, CA 94306

YOU MUST:
• Complete all necessary spaces
• Sign your application

**SEND ALL 3 ELEMENTS
IN THE SAME PACKAGE:**

1. Application form
2. Nonrefundable fee in check or money order payable to Register of Copyrights
3. Deposit Material

MAIL TO:
Library of Congress, Copyright Office
101 Independence Avenue, S.E.
Washington, D.C. 20559-6000

D
Fee are effective
through June 30,
2002. After that date,
check the Copyright
Office Website at
www.loc.gov/copyright
or call (202)
707-3000 for current
fee information.